

DOKNUMMER SUCHSCHRITT 1 1/1 HCA COPYRIGHT 2003 ACS
TITEL

Stable lecithin-containing powders for feeds and foods

PAT.ANMELEDER

Miyoshi Yushi K. K., Japan

ERFINDER Matsutani, N buyuki; Ikemori, Shunsuke; Owada, Hirohisa;
Murakami, Takeshi; Hoshino, Hiroaki

PATENTFAMILIE1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
------------	------	------	-----------------	------

PI JP09121781	A2	13.05.1997	JP1995-314841	08.11.1995
---------------	----	------------	---------------	------------

PRIORITÄT 1995JP-314841 08.11.1995

IPC IPC-Hauptklasse A23J007-00

IPC-Nebenklasse A23K001-16; A23L001-30; A23L001-304

CA-KLASSE 17-6 (Food and Feed Chemistry)

KURZFASSUNG

The powders contain powd. excipients mainly contg. Ca phosphate mixed with 5-70 wt.% lecithins. The powders are easy to handle, improve the emulsifying property, texture, stability, and mold release property of foods, and simultaneously enrich Ca and lecithin in feeds. Crude lecithin (300 g) was gradually added to 300 g $\text{Ca}_3(\text{PO}_4)_2$ to give a powder showing good flowability at room temp. and at 40.degree.. A cow feed contg. the powder was formulated.

SCHLAGWORTE lecithin powder calcium phosphate feed food

CA-INDEX Whey (calcium; stable powd. lecithin contg. Ca phosphate excipients for feeds and foods)

CA-INDEX Bone meal Bread Feed additives Food additives Pasta (stable powd. lecithin contg. Ca phosphate excipients for feeds and foods)

CA-INDEX Lecithins RL: FFD (Food or feed use); BIOL (Biological study);

USES (Uses) (stable powd. lecithin contg. Ca phosphate excipients for feeds and foods)

CA-INDEX 7440-70-2, Calcium, biological studies RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses) (from whey; stable powd. lecithin contg. Ca phosphate excipients for feeds and foods)

CA-INDEX 7757-93-9, Calcium hydrogen phosphate 7758-87-4, Tricalcium phosphate RL: FFD (Food or feed use); BIOL (Biological study); USES (Uses) (stable powd. lecithin contg. Ca phosphate excipients for feeds and foods)

PUBL-TYP Patent

PUBL-SPRACHE Japanese

R3.092/KU - 19.05.2003

Table 6. Commercial Lecithins, % Composition

Component	Crude	Deoiled	Alcohol-soluble fraction	Alcohol-insoluble fraction	PC 70 ^a	PC 90 ^a
phosphatidylcholine	10-15	20-25	40-55	8-12	75-80	90-95
phosphatidylethanolamine	9-12	22	21	24	10	
lecithin						
phosphatidylglycerol	8-10	16	2	27		
polar lipids, others	8-12	15	9	15	7	3
soybean oil	40	3	3	3		
carbohydrates	5	8	3	10		
sterols, glycosides	3	6	7	4		
moisture	1	1	1	1	1	1
miscellaneous	4	4	1	4	4	
trademarks ^c						
Alcolac (ALC)		Alcolac (ALC)	Alcolac (ALC)	Alcolac (ALC)	Phospholipon 80 (ALC/NP)	Phospholipon 90 (ALC/NP)
Nathin (NP)		Phospholipon 25 (NP)	Nathin (NP)	Nathin (NP)	Phoscel (ALC/NP)	Phoscel (ALC/NP)
Centropac (CS)		Centropac (CS)	Phoscel (ALC/NP)			
Yelkin (ADM)		Yelkin (ADM)				
Lecigran (RI)		Lecigran (RI)				
(RI)						

^aPC > 70%
^bPC > 90%
^cNames of companies (suppliers) are given in parentheses. ADM - Archer Daniels Midland; ALC - American Lecithin Co.; CS - Central Soya; NP - Nutrena Processed GmbH; RI - Riedel